

O. H. M. S.

W. J. Gerald
Deputy Minister.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 178

SPIRIT OF CAMPHOR (SPIRITUS CAMPHORÆ)

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OTTAWA, March 26, 1899.

WM. HIMSWORTH, Esq.,
Acting Deputy Minister of Inland Revenue.

SIR,—I beg to hand you herewith a report upon seventy-four (74) samples of spirit of camphor, purchased throughout Canada in January of this year.

The collection was made in consequence of some complaints to the effect that this article was offered with so weak a spirit strength as to make it useless for the purposes to which it is applied by physicians and the public.

The present examination has regard solely to the spirit-strength of the alcohol used. It is intended, in the course of the coming year, to make another collection, in which the content of camphor, and the nature of the alcohol employed as a solvent will be determined.

The British Pharmacopœia prescribes spiritus rectificatus (90 per cent. alcohol) as the proper solvent for preparation of spirit of camphor. This spirit has a specific gravity 0.834; and the resulting spirit of camphor is required to have a specific gravity varying between 0.843 and 0.847. There is an increase of volume of approximately 10 per cent. on dissolving camphor in alcohol, according to pharmacopœal directions for preparation of spirit of camphor. Allowance being made for this increase of volume, the finished spirit of camphor represents an alcoholic solution containing practically 81 per cent. by volume of alcohol.

Reasonable allowance being made for loss of alcohol due to evaporation during manufacture and the opening of bottles in dispensing, I have considered it right to pass all samples showing over 75 per cent. by volume of alcohol. This amount of alcohol is sufficient to retain in solution the whole of the camphor used in the manufacture of pharmacopœal spirit of camphor.

Twelve samples show less than 75 per cent. of alcohol. Of this number eight (8) samples contain above 70 per cent. and may be regarded rather as doubtful, than as actually adulterated, in the sense of having been made with less spirit than the pharmacopœia requires. Four (4) samples, are distinctly too low in spirit, and must be regarded as adulterated under the Act. These are:—

No. 36810	containing	54.08	per cent	Alcohol.
" 36812	"	56.72	"	"
" 937	"	58.60	"	"
" 22903	"	60.84	"	"

This is the first occasion of inspecting spirit of Camphor ; and as it is purposed to institute another inspection, in the course of which a more detailed study of the article will be undertaken, it may be considered rather satisfactory than otherwise, that I am able to report an adulteration of less than 5·5 per cent.

I beg to recommend the publication of this report as Bulletin No. 178.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,

Chief Analyst.

BULLETIN No. 173—SPIRIT OF CAMPHOR—(SPIRITUS CAMPHORÆ).

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Spl. Gr. Distillate to 4 Vols.	Alcohol by Volume.

DISTRICT OF NOVA SCOTIA—R. J. WAUGH, INSPECTOR.

1909.									P. C.
Jan. 12	Spirit of Camphor...	33831	Buckley Bros., Halifax, N.S. ...	4 oz.	35	Vendors	.....	0.9754	83.20
" 11	"	33832	A. A. Thompson, Halifax, N.S. 4 "	"	25	Vendor.	.....	0.9751	84.36
" 19	"	33833	H. E. Wilson, Halifax, N.S.	4 "	30	"	.....	0.9756	82.44
" 20	"	33834	W. F. Odell, Truro.....	4 "	30	"	.....	0.9749	85.16
" 20	"	33835	Hub. Drug Store, Truro.....	4 "	40	"	.....	0.9755	82.84

DISTRICT OF PRINCE EDWARD ISLAND—THEO. MOORE, INSPECTOR.

Jan.	7	Spirit of Camphor...	31448	A. W. Reddin, Charlottetown...	4 oz.	40	Vendors	.....	0.9761	80.60
"	7	"	31449	G. E. Hughes, Charlottetown...	4 "	40	"	.....	0.9750	84.76
"	7	"	31450	Johnson & Johnson, Charlotte-	4 "	40	"	.....	0.9763	79.84
"	11	"	31451	town. Goultie, Summerside	4 "	45	"	.....	0.9784	71.24
"	12	"	31452	A. W. P. Keir, Kensington.....	4 "	40	"	.....	0.9751	84.36

DISTRICT OF NEW BRUNSWICK—J. C. FERGUSON, INSPECTOR.

Jan.	11	Spirit of Camphor...	29882	George A. Moore, St. John, N.B.	4 oz.	40	Vendor.....	0.9751	84.36
"	16	"	29883	A. J. Ryan, Fredericton, N.B.	4 "	20	"	0.9757	82.08
"	18	"	29884	Garden Bros., Woodstock	4 "	20	"	0.9751	84.36
"	25	"	29885	Sussex Mercantile Co., Ltd.	4 "	45	C. H. Fairweather, Dispenser, Sussex Mercantile Co.	0.9751	84.36
"	27	"	29886	A. E. Shaw, Newcastle, N.B.	4 "	20	A. E. Shaw, Newcastle, N.B.	0.9756	82.44

DISTRICT OF QUEBEC—E. BELAND, INSPECTOR.

Jan.	11	Spirit of Camphor...	36808	A. Martineau, 734 St. Valier St. Quebec.	4 oz.	25	Vendor.....	0.9749	85.16
"	11	"	36809	Jos. Masson, 808 St. Valier St., Quebec.	4 "	25	"	0.9763	79.84
"	12	"	36810	G. P. Plamondon, 122 St. Joseph St., Quebec.	4 "	25	"	0.9829	54.08
"	12	"	36811	P. C. Lachevrotiere, 224 St. John St., Quebec.	4 "	40	"	0.9734	86.85
"	12	"	36812	C. P. Delisle, 379½ St. John St., Quebec.	4 "	25	"	0.9822	56.72

DISTRICT OF ST. HYACINTHE—J. C. ROULEAU, INSPECTOR.

Jan.	11	Spirit of Camphor...	935	Pharmacie Larochelle	4 oz.	20	Vendor.....	0.9764	77.48
"	13	"	936	Dr. Bedard, Drummondville...	4 "	30	"	0.9761	80.60
"	19	"	937	Dr. C. P. Verdon, Granby	4 "	35	"	0.9817	58.60
"	19	"	938	Dr. Demers, Farnham	4 "	35	Lynan Knox, Montreal	0.9761	80.60
"	20	"	939	Dr. Guy, St. Jean, Que.	4 "	40	Vendor.....	0.9757	82.08

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Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Sp. Gr. Distillate to 4 Vols.	Alcohol by Volume.

DISTRICT OF MONTREAL—J. J. CO-TIGAN, INSPECTOR.

Jan.	5	Spirit of Camphor...	E. Gagnon, 93 St. Valier Ville, 4 oz...	35	Vendor.....			0.9778	73.92
"	5	"	St. Louis, P.Q.					0.9746	86.36
"	11	"	H. R. Huot, 68 Laurier Av., St. 4 "...	45	"			0.9766	78.72
"	14	"	Louis, P.Q.	30	"			0.9742	87.96
"	22	"	James Fortune, Huntingdon, 4 "...	40	"			0.9742	87.96
			Dr. J. B. Martin, 212 St. Joseph 4 oz...	30	"				
			P.Q.						
			St. Lacharme, P.Q.						
			G. H. Christie, Lachute..... 4 "...	30	"			0.9742	87.96

DISTRICT OF OTTAWA—J. A. RICKEY, INSPECTOR.

Jan.	8	Spirit of Camphor...	W. G. Bolter, Chesterville..... 4 oz...	40	Vendor.....	Sold as Spirit of Camphor after purchase of sample Vendor said it was made with Columbus Spirit.	0.9782	73.12
"	12	"	D. A. Muirhead, Carleton Place 4 "...	30	"	Sold as Spirit of Camphor	0.9761	80.60
"	13	"	Chas A. Adams, Kemptville..... 4 "...	30	McLennan, Kemptville.....	"	0.9811	60.84
"	19	"	J. A. Muirhead, Ottawa..... 4 "...	45	Vendor.....	"	0.9772	76.32
"	20	"	The Modern Pharmacy, Hull, P.Q. 4 "...	40	"	"	0.9740	88.72

DISTRICT OF KINGSTON—JAS. HOGAN, INSPECTOR.

Jan.	8 Spirit of Camphor...	39431	W. W. Gibson, Kingston.....	4 oz.	40	Vendor.....	0 9758	81 72
"	"	39432	D. Bleeker, Belleville.....	4 "	30	"	0 9760	80 96
"	"	39433	A. L. Gun, Belleville.....	4 "	20	"	0 9751	84 36
"	"	39434	W. J. Davison, Port Hope.....	4 "	33	"	0 9758	81 72
"	"	39435	McDermid & Jury, Peterboro.....	4 "	40	Vendors.....	0 9760	80 96

DISTRICT OF TORONTO—H. J. DAGER, INSPECTOR.

Jan.	8 Spirit of Camphor...	35177	M. E. Vanzant, Ltd., Toronto...	4 oz.	35	Vendors.....	0 9747	85 96
"	"	35178	Littlewoods Pharmacy, Hamilton	4 "	35	Vendor.....	0 9749	85 16
"	"	35179	F. W. Mill, Hamilton.....	4 "	35	"	0 9745	86 76
"	"	35180	Walker & Allen, St. Catharines	4 "	35	Vendors.....	0 9747	85 96
"	7	35181	The T. Eaton Drug Co., Ltd., Toronto.	4 "	30	"	0 9750	84 76

DISTRICT OF LONDON—T. KIDD, INSPECTOR.

Jan.	6 Spirit of Camphor...	30556	H. O. Daulop, Goderich, O.....	4 oz.	40	Vendor.....	0 9742	87 96
"	"	30568	W. S. R. Holmes, Clinton, O...	4 "	40	Not known.....	0 9745	86 76
"	"	30578	E. A. Rea, Stratford.....	4 "	40	Vendor.....	0 9754	83 20
"	"	30588	J. D. McKee, Guelph.....	4 "	40	"	0 9746	86 36

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				Quantity.	Cent.			Sp. Gr. Distillate to 4 Vols.	Alcohol by Volume.

DISTRICT OF WINDSOR—JAS. TALBOT, INSPECTOR.

Jan.	7	Spirit of Camphor...	34735	H. Robertson, Sarnia.....	4 oz.	40	Vendor.....	.....	0.9737	p. c. 89.84
"	7	"	34739	Peter McGibbon, Sarnia.....	4 "	25	"	.....	0.9762	80.24
"	8	"	34743	W. H. Dale, Petrolia.....	4 "	50	"	.....	0.9747	85.96
"	11	"	34750	G. Ineson, Ingersoll.....	4 "	40	"	.....	0.9749	85.16
"	11	"	34751	F. G. Walley, Ingersoll.....	4 "	40	"	.....	0.9786	70.36

DISTRICT OF MANITOBA—A. C. LARIVIERE, INSPECTOR.

Jan.	13	Spirit of Camphor...	35821	Morrison's Drug Store, Virden, M.....	4 oz.	40	Vendor.....	.....	0.9755	82.84
"	14	"	35822	E. W. Bailey, Hartney, M.....	4 "	40	"	.....	0.9749	83.16
"	19	"	35823	Millers Pharmacy, Shoal Lake.....	4 "	35	Not known.....	.....	0.9748	85.56
"	19	"	35824	H. K. Clatway, Shoal Lake.....	4 "	35	Vendor.....	.....	0.9750	84.76
"	21	"	45825	F. L. Brown, Winnipeg.....	4 "	30	"	.....	0.9773	75.92

DISTRICT OF CALGARY—R. W. FLETCHER, INSPECTOR.

Jan. 13	Spirit of Camphor.	35382	W. McLean, Calgary.....	4 oz.	25	Vendor.....	0.9743	87.56
" 22	"	35383	B. F. Such, Medicine Hat.....	4 "	50	"	0.9749	85.16
" 22	"	35384	E. M. Cawner, Medicine Hat...	4 "	50	"	0.9767	78.76
" 22	"	35385	C. T. Pringle, Medicine Hat...	4 "	50	"	0.9776	74.72
" 26	"	35386	Eadales Drug Store, Calgary....	4 "	40	"	0.9781	72.56

DISTRICT OF VANCOUVER--J. F. POWER, INSPECTOR.

Jan.	29	Spirit of Crumphor. . .	375663	Marett. Reid, Vancouver.	4 oz.	50	Vendors	0.9743	87.56
"	29	"	375667	Heroog & Strachan, Vancouver. 4 "	40	"	"	0.9746	86.36
"	29	"	375668	L. Henderson, Vancouver	4 "	30	Vendor	0.9760	80.96
"	29	"	375669	Nelsons Drug Store, Vancouver. 4 "	30	"	"	0.9786	70.36
"	29	"	375670	City Drug Store, Vancouver. . . .	4 "	60	"	0.9776	74.72

DISTRICT OF VICTORIA—D. O'SULLIVAN, INSPECTOR.

Jan. 26	Spirit of Camphor...	39289	Dean & Hiscocks, Victoria.....	4 oz..	50	Vendors.....	0.9754	83.20
" 26	"	39290	Hall & Co., Victoria.....	4 " ..	40	"	0.9737	80.84
" 26	"	39291	W. Jackson & Co., Victoria....	4 " ..	35	"	0.9743	87.56
" 27	"	39292	W. S. Perry, Victoria.....	4 " ..	40	Vendor.....	0.9769	77.96
" 27	"	39293	F. J. Williams, Victoria.....	4 " ..	50	"	0.9752	83.96